

CLAIMS

1. An antenna device, comprising:
an antenna element;
5 a high-frequency circuit connected to the antenna element;
a first ground section connected to the high-frequency circuit;
a reactance circuit connected to the first ground section; and
a second ground section connected to the reactance circuit.
- 10 2. The antenna device of claim 1, further comprising:
a transmitter-receiver; and
a feeder line for connecting between at least any one of the first ground
section and the second ground section and the transmitter-receiver.
- 15 3. The antenna device of claim 2,
wherein the feeder line is a coaxial line including
a signal line, which is connected to the high-frequency circuit,
and
a shield line that is disposed so as to surround the signal line and
20 is connected to at least any one of the first ground section and the
second ground section.
4. An antenna device, comprising:
an antenna element;
25 a high-frequency circuit connected to the antenna element;
a ground section connected to the high-frequency circuit;
a reactance circuit; and

a coaxial line having

a signal line and

a shield line that is disposed so as to surround the signal line and
is connected to the ground section,

5 wherein, the shield line has

a first shield line and

a second shield line connected to the first shield line via the
reactance circuit.

10 5. The antenna device of claim 1 or claim 4,
wherein the reactance circuit is formed of a parallel circuit of an inductor
element and a capacitor element.

6. The antenna device of claim 1 or claim 4,
15 wherein the reactance circuit includes a variable capacitance diode
element.

7. The antenna device of claim 1 or claim 4,
wherein the reactance circuit includes
20 a plurality of reactance elements and
a switch for switching the reactance elements.

8. The antenna device of claim 1 or claim 4,
wherein the high-frequency circuit includes a receiving power detecting
25 circuit for controlling a reactance value of the reactance circuit.

9. The antenna device of claim 8,

wherein the high-frequency circuit includes an amplifier, and
the receiving power detecting circuit detects receiving power of output
from the amplifier.

5 10. The antenna device of claim 1 or claim 4,
 wherein the reactance circuit include a reactance-value control circuit for
controlling a reactance value of the reactance circuit.

 11. The antenna device of claim 1 or claim 4,
10 wherein the reactance circuit is positioned so as to have a substantial
distance of a length of n times wavelength and a half of wavelength in electrical
length (where, n takes a positive integer including zero) away from a feeding
point of the ground section.

15 12. The antenna device of claim 3 or claim 4,
 wherein a control signal for controlling a reactance value of the reactance
circuit is added on the signal line.